AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraphs from page 17 line 7 to page 18 line 13, with the following rewritten paragraphs:

It has been previously demonstrated (Yang, Z. P., Chi, E. Y., Kuo, C. C. and Grayston, J. T. 1993. A mouse model of *C. pneumoniae* strain TWAR pneumonitis. Infect. Immun. 61(5):2037-2040) that mice are susceptible to intranasal infection with different isolates of *C. pneumoniae*. Strain AR-39 (Chi, E. Y., Kuo, C. C. and Grayston, J. T. , 1987. Unique ultrastructure in the elementary body of Chlamydia sp. strain TWAR. J. Bacteriol. 169(8):3757-63) ~~was~~ is used in Balb/c mice as a challenge infection model to examine the capacity of chlamydia gene products delivered as naked DNA to elicit a protective response against a sublethal *C. pneumoniae* lung infection. Protective immunity is defined as an accelerated clearance of pulmonary infection.

Groups of 7 to 9 week old male Balb/c mice (6 to 10 per group) ~~were~~ are immunized intramuscularly (i.m.) plus intranasally (i.n.) with plasmid DNA containing the coding sequence of a *C. pneumoniae* polypeptide. Saline or the plasmid vector lacking an inserted chlamydial gene ~~was~~ is given to groups of control animals.

For i.m. immunization alternate left and right quadriceps ~~were~~ are injected with 100μg of DNA in 50μl of PBS on three occasions at 0, 3 and 6 weeks. For i.n. immunization, anaesthetized mice ~~aspirated~~ aspirates 50μl of PBS containing 50 μg DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice ~~were~~ are inoculated i.n. with 5 x 10^5 IFU of *C. pneumoniae,* strain AR39 in 100μl of SPG buffer to test their ability to limit the growth of a sublethal *C. pneumoniae* challenge.

Lungs ~~were~~ are taken from mice at day 9 post-challenge and immediately homogenised in SPG buffer (7.5% sucrose, 5mM glutamate, 12.5mM phosphate pH7.5). The homogenate ~~was~~ is stored frozen at –70°C until assay. Dilutions of the homogenate ~~were~~ are assayed for the presence of infectious chlamydia by inoculation onto monolayers of susceptible cells. The inoculum ~~was~~ is centrifuged onto the cells at 3000rpm for 1 hour, then the cells ~~were~~ are incubated for three days at 35°C in the

presence of 1μg/ml cycloheximide. After incubation the monolayers ~~were~~ are fixed with formalin and methanol then immunoperoxidase stained for the presence of chlamydial inclusions using convalescent sera from rabbits infected with *C. pneumoniae* and metal-enhanced DAB as a peroxidase substrate.